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(54) LIGHT-EMITTING DIODE

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(57) Abstract:

PROBLEM TO BE SOLVED: To provide a light-emitting diode, which has simplified manufacturing steps, improved manufacturing yield, and a spectroscopic characteristic that enhances the efficiency of the light utilization.

SOLUTION: The light-emitting diode comprises a spectroscopic material member 33, in which a fluorescent substance 32 is mixed in a transparent substance 31; and a semiconductor light-emitting element 34. The semiconductor light-emitting element 34 and the spectroscopic material member 33 are separated to constitute the diode such that they are arranged to keep a prescribed mutual distance. The spectroscopic material member 33 is coated with an optical thin film 51 that transmits the light ray radiated by the semiconductor light-emitting element 34 and reflects a part of the light ray which is radiated by the fluorescent substance 32 and proceeds toward the semiconductor light-emitting-element side so that the reflected light ray proceeds in the forward direction.

